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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,465	04/20/2006	Takuya Ishioka	289999US2PCT	7159

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EXAMINER	
CHAN, KAWING	

ART UNIT	PAPER NUMBER
2837	

NOTIFICATION DATE	DELIVERY MODE
07/27/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/576,465	ISHIOKA ET AL.	
	Examiner	Art Unit	
	Kawing Chan	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5 and 7-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5 and 7-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/20/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/27/09 has been entered.

Claims 1, 4, 5, 7-15 are pending for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

MPEP 2164.01 establishes the analysis required to determine whether the filed disclosure contains sufficient information regarding the subject matter of the claims as to one skilled in the art to make and use the claimed invention without undue experimentation. The factors to be considered to determine whether any necessary experimentation is undue, also known as The Wand factors, see In re Wands, 858 F. 2d 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) include, but are not limited to:

(A) The breadth of the claims;

(B) The nature of the invention;

(C) The state of the prior art;

(D) The level of one of ordinary skill;

(E) The level of predictability in the art;

(F) The amount of direction provided by the inventor;

(G) The existence of working examples; and

(H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

In Re claim 15, after analyzing the application with the above factors, the examiner concluded that there is no enabling disclosure of the operation of the self-diagnosis of the safety device. The specification and claim 15 only merely discloses the safety device having a self-diagnosis function, but no where in the specification or in the claim have disclosed any related operation step or examples of performing the self-diagnosis function. Based on the reason discussed above, the self-diagnosis function is

determined as undue experimentation, and the specification is failed to disclose sufficient description to convey one skilled in the art to make or use the invention. Since the operation of the self-diagnosis function is unknown, it is also unable to convey one skilled in the art to checks the operation of the self-diagnosis of the safety device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukai et al. (US 5,557,546) in view of Angst (WO 03/004397 A1) (Angst US 2004/0173413 A1 is the equivalent English translation of WO 03/004397 A1, hereinafter all the rejections in the following are based on US 2004/0173413 A1) and Suzuki (US 4,998,601).

In Re claim 1, 9 and 12, with reference to Figures 2-3, Fukai discloses an elevator control apparatus (1, 2) comprising:

- An abnormality monitoring portion (24) that determines whether there exists an abnormality in an elevator (E) based on information from a sensor (22) (Col 4 lines 23-54); and
- A history information recording portion (26) that records a history of information (operational data of an elevator) concerning the determination by the abnormality monitoring portion (24) (Abstract; Col 5 lines 1-13);

Fukai fails to disclose a speed monitoring portion that performs a comparison between a detected speed of the car and a set value, outputting of a signal for stopping a car upon detecting an abnormality, braking the car using the signal for stopping the car and a soundness diagnosing portion.

However, Angst discloses a speed monitoring portion (24) that performs a comparison between a detected speed of the car and a set value (28: speed limit value) (Paragraphs [0033-0034]), sets the set value according to a position of the car (Figure 3: the speed limit value are set on the basis of the position of the car during travel way), outputs a signal (Figure 9; Paragraph [0038]) for stopping a car depending on a result of the comparison (when overspeed condition is detected), and braking the elevator car using the signal for stopping the car (Paragraph [0038]).

Nevertheless, with reference to Figure 3, Suzuki teaches a soundness diagnosing portion (ST 20, ST 22) that performs an automatic diagnosis on soundness of the abnormality monitoring portion (i.e. a command of restoring the usual operation when any abnormality is detected) (Col 6 line 28 to Col 7 lines 4), and it would have been obvious to one having skill in the art at the time of the invention was made to

record the result of the soundness diagnosis since Fukai teaches a recording portion (27) is capable of recording routine inspection history (i.e. experiences of previous maintenance work). In addition, while Suzuki teaches the elevator system checks all the operation data of the elevator with respect to their own allowable value during travel (Col 6 lines 34-47), it would have been obvious to one having skill in the art at the time of the invention was made to check the set value with respect to the car position to its own allowable value with reasonable expectation of success.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Fukai with the teachings of Angst and Suzuki, since it is known in the art to apply braking system on an elevator upon activation signal received so that the elevator can be stopped immediately once an abnormality of the elevator is detected, and it is also known in the art to utilize soundness diagnosing portion to detect abnormal noise of an elevator created during an operation so as to be able to stop the operation of the elevator to protect passenger inside the elevator.

In Re claim 7, Fukai teaches the history information recording portion (26) is capable of recording routine inspection history (i.e. operational data of an elevator are constantly and successively stored) (Abstract; Col 1 lines 10-33; Col 6 lines 29-37).

In Re claim 8, with reference to Figures 1A, 2 and 3, Angst discloses the speed detection pattern (28) includes a constant speed section between the end portions

thereof; and the abnormality monitoring portion (24) compares the end portions and the constant speed section with the speed of the car (27).

In Re claims 10 and 13, with reference to Figures 7-9, Angst discloses a second speed detection pattern (28.2, 28.3) which are higher than the speeds of said speed detection pattern (28.1) at corresponding car positions, wherein the abnormality monitoring portion (24.2) further determines whether the speed of the car exceeds a speed of a corresponding portion of the second speed detection pattern (Paragraph [0041]).

In Re claims 11 and14, Angst discloses a braking device (10) which brakes the car in different amounts, depending on whether the speed of the car is detected to exceed said speed detection pattern or said second speed detection pattern (Paragraph [0041]).

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukai et al. (US 5,557,546) in view of Angst (WO 03/004397 A1) (Angst US 2004/0173413 A1 is the equivalent English translation of WO 03/004397 A1, hereinafter all the rejections in the following are based on US 2004/0173413 A1) and Suzuki (US 4,998,601)as applied to claim 1 above, and further in view of Lence Barreiro et al. (US 2003/0000777 A1).

In Re claims 4 and 5, Fukai, Angst and Suzuki have been discussed above, but they fail to disclose the recording portion records a combination of data and the combination of data is accumulated for each corresponding time.

However, Lence Barreiro teaches the combination of data is stored and accumulated for each corresponding time (Paragraph [0008]).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Fukai, Angst and Suzuki with the teachings of Lence Barreiro, since it is known in the art to store and accumulate the operation data of an elevator (i.e. speed, position) so as to be able to determine notable event (i.e. abnormality) and recommend maintenance action (Paragraph [0008]).

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukai et al. (US 5,557,546) in view of Angst (WO 03/004397 A1) (Angst US 2004/0173413 A1 is the equivalent English translation of WO 03/004397 A1, hereinafter all the rejections in the following are based on US 2004/0173413 A1), Suzuki (US 4,998,601) and Muff et al. (US 2002/0070082 A1).

In Re claim 15, with reference to Figures 2-3, Fukai discloses an elevator control apparatus (1, 2) comprising:

- An abnormality monitoring portion (24) that determines whether there exists an abnormality in an elevator (E) based on information from a sensor (22) (Col 4 lines 23-54); and
- A history information recording portion (26) that records a history of information (operational data of an elevator) concerning the determination by the abnormality monitoring portion (24) (Abstract; Col 5 lines 1-13);
- The system is capable of checking the operation of the self-diagnosis of the safety device (Col 5 lines 44-64).

Fukai fails to disclose a speed monitoring portion that performs a comparison between a detected speed of the car and a set value, outputting of a signal for stopping a car upon detecting an abnormality, braking the car using the signal for stopping the car, a safety device including a braking member and an actuator portion, and a soundness diagnosing portion.

However, Angst discloses a speed monitoring portion (24) that performs a comparison between a detected speed of the car and a set value (28: speed limit value) (Paragraphs [0033-0034]), sets the set value according to a position of the car (Figure 3: the speed limit value are set on the basis of the position of the car during travel way), outputs a signal (Figure 9; Paragraph [0038]) for stopping a car depending on a result of the comparison (when overspeed condition is detected), and braking the elevator car using the signal for stopping the car (Paragraph [0038]).

Nevertheless, with reference to Figure 3, Suzuki teaches a soundness diagnosing portion (ST 20, ST 22) that performs an automatic diagnosis on soundness

of the abnormality monitoring portion (i.e. a command of restoring the usual operation when any abnormality is detected) (Col 6 line 28 to Col 7 lines 4), and it would have been obvious to one having skill in the art at the time of the invention was made to record the result of the soundness diagnosis since Fukai teaches a recording portion (27) is capable of recording routine inspection history (i.e. experiences of previous maintenance work).

Nevertheless, Muff discloses a safety device (Figure 2) including a braking member (26, 27) and an actuator portion (15, 31) for moving the braking member, the braking member being capable of moving into and away from contact with a car guide rail (1) (Paragraph [0023]).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Fukai with the teachings of Angst, Suzuki and Muff, since it is known in the art to apply braking system on an elevator upon activation signal received so that the elevator can be stopped immediately once an abnormality of the elevator is detected, and it is also known in the art to utilize soundness diagnosing portion to detect abnormal noise of an elevator created during an operation so as to be able to stop the operation of the elevator to protect passenger inside the elevator, and it is also known in the art to utilize a safety device with an actuator for moving a braking member into contact with the guide rail so as to be able to brake the elevator in an emergency situation.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/
Primary Examiner, Art Unit 2837

Kawing Chan
Examiner